

**WAIKANE TRAINING AREA  
RESTORATION ADVISORY BOARD (RAB) MINUTES  
WEDNESDAY, JUNE 19, 2013  
WAIAHOLE ELEMENTARY SCHOOL CAFETERIA  
48-215 WAIAHOLE VALLEY ROAD  
WAIAHOLE, ISLAND OF OAHU, HAWAII**

1. Roger Morey called the meeting to order at 7:10 p.m. and welcomed everyone.
2. Those in attendance included Government Co-Chair Kevin Pien of U.S. Army Corps of Engineers (USACE); RAB members Byron Ho, Kyle Kajihiro, Steven Mow, Roger Morey, and Paul Zweng.

Others in attendance included Dale Adams, Robert H-H Harter from DEM, City & County of Honolulu, James T. Keenan from the Forest Conservancy, Wendy Matsuzaki the Waiahole Elementary School Principal and Paul Chong from the State of Hawaii-Department of Health.

Contractors present included David Wolf of Zapata, Inc., and Clayton Sugimoto of WCP Inc. (WCP).

RAB members absent were John Adolpho, Heidimarie Chung, Walea Constantinau, Todd Cullison, Robert Fernandez, William Keoni Fox, David Henkin, Chris Lopes, Karen Maeda, Laurie Noda, Bernie Panoncial, Eunice Lehua Pate and Poola Villarimo.

The agenda of the meeting was:

- I. Review/Approval of February 2013 Meeting Minutes
- II. Welcome/Introductions
- III. Formal Public Meeting
- IV. Update on Proposed Plan, David Wolf of Zapata, Inc.
- V. Next Meeting
- VI. RAB and Community Member Open Discussion

<b>Name</b>	<b>Action Items from 19 June 2013</b>	<b>Suspense Date</b>	<b>Completed</b>
K. Pien	Accept public comments on Proposed Plan	19 July 2013	<b>19 July 2013</b>

- I. Review/Approval of February Meeting Minutes
  - o February Meeting Minutes approved as submitted unanimously by RAB members present
- II. Welcome and Introductions
  - o Renewal of membership for all RAB members

- Wendy Matsuzaki the principal of Waiahole Elementary School expressed interest in becoming a RAB member.
- All RAB members present voted in favor of maintaining and renewing membership of all RAB members and accepting Wendy Matsuzaki as a new member.
- The following RAB members stated they will not be able to continue as RAB members: Keoni Fox, Laurie Noda, and Heidi Marie Chung.
- David Henkin wants to continue, but he is out of town. His membership and position will be discussed at the next meeting.

### III. Formal Public Meeting

- Court reporter is present to take the transcript of the presentation of the Proposed Plan.
- End of the presentation there will be a Question and Answer session to clarify and questions, concerns, or issues on the proposed plan.
- Oral comment period. 30 day comment period starts from today and will last to July 19<sup>th</sup>.
- Purpose of the meeting is to discuss the proposed plan of the Waikane Training Area and to present each of the three ammunition response sites.
- To benefit the court reporter please speak at a decent volume, speak one at a time and identify yourself.

### IV. Proposed Plan, David Wolf of Zapata, Inc.

#### A. FUDS Program

- Congress established the Formerly Used Defense Sites (FUDS) Program in 1986. US Army Corps of Engineers manages the FUDS Program for Department of Defense (DoD). The Corps of Engineers Honolulu District manages FUDS projects including the former Waikane Training Area.
- Formerly Used Defense Sites
  - i. FUDS are properties that were formerly owned, leased, possessed by, or otherwise under the operational control of the DoD or military prior to October 17, 1986.*
- FUDS program follows the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) process

#### B. CERCLA Process

- Currently in the Proposed Plan stage
- Remedial Investigation/Feasibility Study (RI/FS) stage completed
- Emphasis on the public as a major component

#### C. Goals of CERCLA

- Protect Human Health and Welfare
- Protect and Preserve the Environment

- Manage Risk

D. Former Waikane Training Area

- Leased by the military from 1942 to 1976
- 3 Munitions Response Sites (MRS)
  - i. Western Mountainous Region MRS
  - ii. Southern Impact Region MRS
  - iii. Southeastern Region MRS

E. Remedial Investigation (RI) Objective

- Define the NATURE and EXTENT of Munitions and Explosives of Concern (MEC) and Munitions Constituents (MC) Contamination
- Field Work Tasks
  - i. Brush Clearing
  - ii. Surveying
  - iii. Intrusive Investigation for MEC
    1. Transects and Grids (57 grids and over 18 miles of transects)
  - iv. Environmental Sampling for MC
  - v. Archeological and Biological Monitoring

F. Remedial Investigation Report

- Risk Assessment
  - i. MEC Hazard Assessment (HA)
    1. Qualitative measure of an explosive hazard to human receptors
  - ii. Human Health Risk
    1. Evaluates potential risk to human health presented by munitions constituents
  - iii. Ecological Risk
    1. Evaluates potential risk to the environment presented by munitions constituents

G. MEC Hazard Assessment Results

- MEC HA not conducted in Western/Mountainous Region MRS
  - i. No MEC found during previous investigations
  - ii. Very limited site accessibility and proposed future land use activities
  - iii. A complete MEC exposure pathway (i.e., MEC source, receptor, and receptor acting upon MEC item) is unlikely
- Baseline condition is “post removal action” in the Southern Impact Region and Southeastern Region MRSs

- MEC HA hazard level “4” identifies low potential explosive hazard conditions in Southern Impact Region MRS and Southeastern Region MRS

- MEC may still pose a hazard

#### H. Human Health and Ecological Risk Assessment Results

- Elevated MC concentrations in soils were limited to the Southeastern Region MRS in a localized area within removal are AOC #2
- Confirmation subsurface soil samples were collected at location of highest lead concentration within AOC #2 (Southeastern Region MRS)
- Confirmation samples were below State of Hawaii, Department of Health (HDOH) Environmental Action Level (EAL) for lead
- Relatively low magnitude of exceedances
- Negligible risk potential to human health or ecological receptors from MC exposure in soil

#### I. Summary of Results-MC

- Some sample results exceeded screening levels in soil
- Risk assessment indicated negligible risk to human health and ecological receptors
- No further action required to address MC

#### J. Summary of Results-MEC Western/Mountainous Region MRS

- No MEC found during previous investigations
- There is no evidence of concentrated munitions use within the MRS
- A complete MEC exposure pathway is unlikely to exist
- Proceed to Feasibility Study (FS) phase for MEC

#### K. Summary of Results-MEC Southern Impact Region and Southeastern Region MRSs

- No MEC found during RI; only munitions debris (MD)
- No additional impact areas were identified in the MRSs
- Proceed to FS phase for MEC

#### L. Remedial Action Objectives

- Manage MEC exposure risk through a combination of removal/remediation, administrative controls, and/or public education; thereby rendering the site as safe as reasonably possible to humans and the environment and conducive to the anticipated future land use

#### M. Feasibility Study Purpose

- Develop and evaluate appropriate remedial alternatives
- Evaluate remedial alternatives against National Contingency Plan (NCP) nine criteria:

**a. Threshold Criteria**

- i. Overall protection of human health and the environment
- ii. Compliance with Applicable or Relevant and Appropriate Requirements (ARARs)

**b. Balancing Criteria**

- i. Long-term effectiveness
- ii. Reduction of toxicity, mobility, or volume
- iii. Short-term effectiveness
- iv. Implementability
- v. Cost

**c. Modifying Criteria**

- i. State acceptance (pending FS review/comments)
  - ii. Community acceptance (pending FS review/comments)
- A specific remedy is not selected during the FS process

N. Feasibility Study Response Alternatives

- Alternative 1-No Action
- Alternative 2-Land Use Controls (LUCs)
- Alternative 3-Surface MEC Removal and Implementation of LUCs
- Alternative 4-Surface and Subsurface MEC Removal and Implementation of LUCs
- Alternative 5-Subsurface Removal to Support Unlimited Use

O. Alternative 1-No Action

- Baseline for comparison of other risk-reduction alternatives
- No action would be taken to address MEC potentially present at the MRSs
- No restriction would be placed on access to the site
- No alternative is appropriate for sites where
  - i. No MEC has been found, or
  - ii. Where there is no documented evidence of military munitions usage.

P. Alternative 2-LUCs

- LUCs are physical, legal and administrative controls
- Warn people of the potential MEC dangers (signs and MEC awareness program)
- Impose a use restriction (land use and permitting)
- Requires landowner and agency participation
- Can be a component of other remedial actions

- Appropriate if MD/Potential MEC present

Q. Alternative 3-Surface MEC Removal and Implementation of LUCs

- Involves removal and disposal of MEC/MD located on the ground surface or partially buried
- Requires teams of unexploded ordnance (UXO)-qualified personnel to use visual identification, aided by hand-held instruments, to search for MEC
- Vegetation removal would be required
- Appropriate if documented MEC and MD are present on ground surface
- Current/Future land use includes surface activities only (i.e., hiking and hunting). No intrusive activities
- Combined with LUCs

R. Alternative 4-Surface and Subsurface MEC Removal and Implementation of LUCs

- Involves a combination of surface and subsurface MEC/MD removal and disposal
  - i. Requires teams of UXO-qualified personnel aided by hand-held instruments to search for MEC
  - ii. Extensive vegetation removal would be required
- The effectiveness of subsurface removal is limited by the technology available at the time of removal
- Appropriate if documented MEC and MD are present on surface and in areas with high MEC subsurface density
- Current/Future land use includes intrusive activities (i.e., residential, construction, agriculture)
- Combined with LUCs

S. Alternative 5-Subsurface MEC Removal to Support Unlimited Use

- This alternative involves a combination of surface and subsurface MEC removal to a depth which allows for unlimited use and no LUCs
  - i. Requires teams of UXO-qualified personnel to search for MEC
  - ii. Extensive site-wide vegetation removal and excavation with heavy machinery would be required to remove all metallic items
- The effectiveness of subsurface removal is limited by the technology available at the time of removal
- Appropriate if documented MEC and MD present on surface and in areas with high MEC subsurface density
- No LUCs

T. Preferred Alternatives

U. Western/Mountainous Region MRS

V. FS Alternatives Summary Western/Mountainous Region MRS

Alternative	Cost (30-year Present Worth)	Rationale
1 - No Action	\$0	No risk reduction
2 - LUCs	\$747,170	Reduce potential risk by providing signage and community MEC educational awareness program with safety training.
3 - Surface MEC Removal and Implementation of LUCs	--	Not considered based on lack of MEC found on the surface during the EE/CA and RI. Active investigation/remedy measures are not practical throughout the MRS.
4 - Surface and Subsurface MEC Removal and Implementation of LUCs	--	Not considered based on lack of MEC found on the subsurface during the EE/CA and RI. Limited intrusive activity anticipated for future land use. Active investigation/remedy measures are not practical throughout the MRS.
5 - Subsurface Removal to Support Unlimited Use	--	Not considered because it is not technically feasible, does not comply with ARARs and is cost prohibitive compared to the other alternatives.

- Steven Mow: How does alternative 5 not comply with the ARAR?
- David Wolf response: The ARAR is the threatened endangered species act. Extensive vegetation and soil removal would be required in order to do the perform investigation.
- Steven Mow response: If it doesn't comply with ARAR it already fails the threshold criteria for alternatives, so it shouldn't be listed at all.
- David Wolf response: It was eliminated in the first phase of the evaluation process. It has to be reviewed in the feasibility study.
- Kevin Pien response: It is shown because it was considered as an alternative even if it didn't pass through the initial screening, but protectiveness of health complies with the ARAR.

W. Preferred Alternative Western/Mountainous Region MRS

- Alternative 2-Land Use Controls
  - i. Community Education and Awareness Program
  - ii. Five-year Reviews to ensure the LUCs remain effective in controlling potential explosive hazards
  - iii. Approximately \$747,170 to administer LUCs over 30 years

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- Roger Morey: What does it mean to administer LUCs over 30 years? What does administering mean?
- David Wolf response: There will be 5-yr reviews (six), annual community awareness opportunities, flyers, etc.
- Dale Adams: Does the City & County property overlap with the areas that are being looked at?
- David Wolf response: It does not overlap with City & County property.
- Kyle Kajihiro: Are access (fencing, etc.) and signs considered as LUCs?
- David Wolf response: Only information, not signage and fences are considered.
- Dale Adams: Is there a difference between fencing and signage between the north and south side of the streets? Where the munitions are located?
- Kevin Pien response: The north side of Waikane stream is currently owned by the Marine Corps. They maintain the fencing and signage for that parcel and are conducting their own investigation. The Corps of Engineers is conducting the CERCLA investigation on areas outside of the Marine Corps parcel. On the Marine Corps parcel, munitions were located towards the ridge. Munitions were not found near the stream portion of the site. On the FUDS-eligible parcels, during the Remedial Investigation of the Southeastern Region and Southern Impact Region, no live munitions were found, only munitions debris.

X. Southern Impact Region MRS

Y. FS Alternatives Southern Impact Region MRS

Alternative	Cost (30-year Present Worth)	Rationale
1 - No Action	\$0	No risk reduction
2 - LUCs	\$747,170	Reduce potential risk by providing signage and community MEC educational awareness program with safety training.
3 - Surface MEC Removal and Implementation of LUCs	\$1,764,790	Reduce risk for potential receptors which activities involve surface use. Receptors may still encounter subsurface MEC. Cost reflects surface removal over accessible area (+/- 2 acres) within focused area where anticipated future land use includes agricultural activities.
4 - Surface and Subsurface MEC Removal and Implementation of LUCs	\$1,820,100	High level of protectiveness for proposed future activities. Cost reflects surface and subsurface removal within focused area where anticipated future land use includes intrusive activities (agricultural) (+/-2 acres)



Alternative	Cost (30-year Present Worth)	Rationale
5 - Subsurface Removal to Support Unlimited Use	--	Not considered because it is not technically feasible, does not comply with ARARs and is cost prohibitive compared to the other alternatives.

Z. Preferred Alternative Southern Impact Region MRS

- Alternative 4-Surface and Subsurface MEC Removal and Implementation of LUCs
  - i. Focused removal in areas where anticipated future land use includes intrusive activities (agricultural). Approximately 2 ac.
  - ii. LUCs-Community Education and Awareness Program
  - iii. Five-year Reviews to ensure the response remains protective of human health
  - iv. Approximately \$1,820,100 for the remedial action and to administer LUCs over 30 years

AA. Surface/Subsurface Removal Action Areas

- Southern Impact Region MRS-red boundary is where a removal action was conducted concurrently with Remedial Investigation, there was no MEC found.
- Hatched areas are where proposed subsurface removal. Approximately 1.5 acres adjacent to previous removal action area as well as 0.5 acre of southeast boundary of MRS.

BB. Southern Region MRS

CC. FS Alternatives Southeastern Region MRS

Alternative	Cost (30-year Present Worth)	Rationale
1 - No Action	\$0	No risk reduction
2 - LUCs	\$747,170	Reduce potential risk by providing signage and community MEC educational awareness program with safety training.
3 - Surface MEC Removal and Implementation of LUCs	\$2,688,060	Reduce risk for potential receptors which activities involve surface use. Receptors may still encounter subsurface MEC. Cost reflects surface removal over accessible area (+/- 36 acres): expanded area around AOC #2; areas where anticipated future land use includes agricultural activities; and high MD area SW of AOC #2.

Alternative	Cost (30-year Present Worth)	Rationale
4 - Surface and Subsurface MEC Removal and Implementation of LUCs	\$3,844,760	High level of protectiveness for proposed future activities. Cost reflects surface and subsurface removal within focused areas (+/- 36 ac): expanded area around AOC#2: areas where anticipated future land use includes intrusive activities (agricultural); and high MD area SW of AOC #2.
5 - Subsurface Removal to Support Unlimited Use	--	Not considered because it is not technically feasible, does not comply with ARARs and is cost prohibitive compared to the other alternatives.

DD. Preferred Alternative Southeastern Region MRS

- Alternative 4-Surface and Subsurface MEC Removal and Implementation of LUCs.
  - i. Focused removal in expanded area around AOC #2: areas where anticipated future land use includes intrusive activities (agricultural) and relatively high density MD area southwest of AOC #2. Approximately 36 ac.
  - ii. LUCs - Community Education and Awareness Program.
  - iii. Five-year Reviews to ensure the response remains protective of human health.
  - iv. Approximately \$3,844,760 for the remedial action and to administer LUCs over 30 years.

EE. Surface/Subsurface Removal Action Areas

- Grey hatched area is the proposed removal action alternative

FF. Decision Documents

- Identifies selected alternative for each MRS
  - i. Three different decision documents are site specific
- Address public comments on the Proposed Plan (Responsiveness Summary)
- Reviewed by State of Hawaii Department of Health
- Place final Decision Document in Information Repository and Administrative Record File

GG. What Happens Next?

- Proposed Plan
  - i. Present preferred Alternatives

- ii. Public Meeting
- iii. 30 day Public Review
- iv. Comments requested by 19 July 2013
- v. Final: August 2013

- Decision Documents
  - i. Final: September 2013

HH. Safety

- RECOGNIZE-Military Items can be DANGEROUS
- RETREAT-DO NOT TOUCH IT! Move away from the area
- REPORT-CALL 911

II. Question and Answer Session

- Paul Zweng: Will the decision document be completed by September? How much time does the decision document take for the military to review? What happens after that?
- David Wolf response: Yes. The decision document will be completed by September. We would move onto the remedial stages. Defer to Kevin Pien on how long it will take to review and then start the remedial phase.
- Kevin Pien response: Once the decision document is complete, budget and funding will need to take place. This site is high priority for our State regulators, USACE FUDS program, and elected officials. For the next fiscal year, the remedial design phase is budgeted for.
- Bob Harter: Do you do public education/outreach as a normal operating procedure throughout the year?
- Kevin Pien response: Yes.
- Robert Morey: Is the dollar amount recommended on the highest or lowest level?
- Kevin Pien response: In the Western/Mountainous region, there are two alternatives that made it through the initial screening; alternative 2 and the no action alternative.
- Kyle Kajihiro: Do you have an older map (last meeting) to compare to what is being proposed?
- Kevin Pien response: I don't have one on hand, but I can tell you what the differences are. Originally the buffer area was only around AOC 2. A 200-foot buffer from the previous map where MEC items were found during the removal action was added to the map on the southwest area which had relatively high munitions debris. Along the road the area is planned to be used for future agricultural activities. The southern impact area has a lo'i planned for future restoration.

- Kyle Kajihiro: In the time critical response area, is it considered to be unlimited use?
- Kevin Pien response: It underwent a clearance. MEC removal or clearance operations you can't guarantee 100%. Land use controls are still required.
- Paul Zweng: If you compare the Marine parcel and the areas where the removals were completed, can you say the Corps areas will have the same intent of clearing the areas to become an area where you are able to use the land for general public usage.
- Kevin Pien response: It is difficult to compare the two locations based on the remedial investigation results because on the Marine parcel they did not find any munitions or munitions debris. In the Southern Impact and Southeastern FUDS MRSs we have found MEC and MD. If the Marines found MEC and MD in those areas, the land would not allow for unlimited usage.
- Kim Mecham response: There is no 100% guarantee. We continue to monitor the site (5-yr reviews) and warn the public that there is still a potential of munitions are on site.
- Paul Zweng: Are there other levels to continue the cleanup at a higher confidence level?
- Kevin Pien response: Alternative 5, but does not comply with the threshold criteria. There are several reasons why alternative 5 is not used; technical adaptability, cost, non-compliance with ARARs, etc.
- Paul Zweng: Why is alternative 5 not given more consideration?
- David Wolf response: Best available current technology cannot provide a confidence level that 100 percent of the MEC items have been removed and by definition, unrestricted use cannot incorporate land use controls.
- Steven Mow response: If you did alternative 5 the site will be closed. If you happen to come across a bomb, then you would have to call an emergency response team. Alternative 4 contains a 5-year long term monitoring and it is easier to mitigate. The long term monitoring will allow the Army to come back and take a look at the area if munitions are found.
- Kyle Kajihiro: With the 5-year review, if the land owner wanted to do construction on property will it reactivate a supplemental investigation?
- Steven Mow response: If MEC is discovered.
- Kim Mecham response: The CERCLA process requires us to base the decision on anticipated future land use. At this point of time, no landowner has expressed any interest or planned intrusive use for the land.
- Kevin Pien response: The 5-year review plan does take into account of future land use changes.
- James Keenan: Is the properties part of the City and County property?
- Kevin Pien response: City and County property is everything to the east of the property boundary (approximately half AOC 2).

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- Byron Ho: The City and County property will be used as a nature park like Foster Gardens.

JJ. Oral Comment Session

- No comments were presented at the meeting
- Mail or e-mail comments to Kevin Pien
- Comment period ends Friday July 19, 2013

V. Next Meeting

- Tentatively Scheduled for Wednesday October 9, 2013.

VI. RAB and Community Member Open Discussion

- Kevin Pien adjourned the meeting at 08:32 p.m.